



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

11/030,907

01/10/2005

Stephane Linglet

Q85658

3835

23373

7590

07/23/2007

SUGHRUE MION, PLLC

2100 PENNSYLVANIA AVENUE, N.W.

SUITE 800

WASHINGTON, DC 20037

EXAMINER

DAVIS, ROBERT B

ART UNIT

PAPER NUMBER

1722

MAIL DATE

DELIVERY MODE

07/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 11/030,907	<b>Applicant(s)</b> LINGLET ET AL.	
	<b>Examiner</b> Robert B. Davis	<b>Art Unit</b> 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 15-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-20 and 22-25 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 15-20, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shelby et al (4,698,012: figures 2-4, 7 and column 4, lines 22-50) taken together with Neugebauer (4,602,874: figures 1 and 2; and column 3, lines 40-68) and either El-Ibiary (5,433,525: figures 1-5 and column 1, lines 7-37) or Duffy et al (5,642,105: figure 1 and column 1, line 6 to column 2, line 22).

Shelby et al disclose a blow molding apparatus comprising: a rotary mount (174), the rotary mount comprises two rings (52, 54) capable of rotating relative to each other, one ring attached to stationary frame (44) each ring having a raceway, and the mount

Art Unit: 1722

further having rollers (see figure 7) between the two raceways (52, 54). The reference discloses two mold clamping plates (46, 48) which act as carousels for opposite pairs of a blow molding apparatus. Shelby et al do not disclose cooling means for the bearings, means for controlling or measurement means for measuring the temperature of the mount.

Neugebauer discloses a system for cooling a rotary mount comprising two rings (inner ring 2b and an outer ring 2a) and an intervening ball bearing (roller bearing 10) capable of relative rotation, each ring having a raceway; the cooling system comprises a circuit (21,22,25) for the passage of a cooling fluid. The reference states that the pressure and/or amount of the cooling medium are regulated according to a command variable, the room temperature in comparison to the measured temperature of the spindle.

El-Ibiary and Duffy et al each disclose temperature-sensing means for a bearing.

El-Ibiary discloses a thermocouple or other temperature measurement device (85) to accurately represent the bearing temperature. Duffy et al disclose a pair of transducers (24, 40) that transmit bearing temperatures to an electronic system (42).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of Shelby et al by adding a cooling system for passage of a cooling fluid and a control means to control the amount of cooling fluid in comparison to the temperature of the apparatus as disclosed by Neugebauer for the purpose of cooling bearings that are heated due to bearing friction. The heat generated

Art Unit: 1722

by the bearings results in uneven temperature distribution in the apparatus and results inexactness in the process associated with the machine.

It would have been further obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of the combination of Shelby et al and Neugebauer by using a bearing temperature sensor as disclosed by either El-Ibiary or Duffy et al for the purpose obtaining a temperature measurement at the point of the machine that is being controlled. Accurate measurement of the temperature of the bearings is critical to the temperature control of the bearings.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 is rejected for being dependent upon canceled claim 8. The scope of the claim cannot be determined.

***Allowable Subject Matter***

6. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the prior art of record teaches or suggests the apparatus of claim 18, wherein the apparatus comprises at least two stages, and the cooling fluid is caused to

circulate in two opposite directions from a given stage of the circuit to the stage, which is contiguous therewith. Neugebauer discloses a cooling arrangement for a bearing assembly of a rotary apparatus wherein two cooling conduits per bearing are shown in figure 1 of the apparatus, but the reference fails to disclose or suggest two stages having cooling fluid caused to circulate in two opposite directions which are contiguous therewith.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 15-25 have been considered but are moot in view of the new ground(s) of rejection. It is noted that claim 15 is not exactly the same as original claims 1 and 2. The important difference is the fact that a carousel of a receptacle blow-molding machine is required by the claim. Original claims 4-14 of the application were not examined in the first action because these claims were improper multiple dependent claims.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

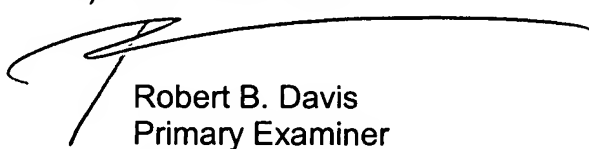
Art Unit: 1722

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert B. Davis  
Primary Examiner  
Art Unit 1722

7/20/07